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### THE GEORGE WASHINGTON UNIVERSITY WASHINGTON, D. C.

THE NAVY GRADUATE COMPTROLLERSHIP COURSE

HOSPITAL ADMINISTRATION NEEDS THE MODERN CONTROLLERSHIP CONCEPT

BY

COMMANDER JULIAN I. SCHOCKEN, USN

WRITTEN FOR

A. REX JOHNSON, Ph. D.

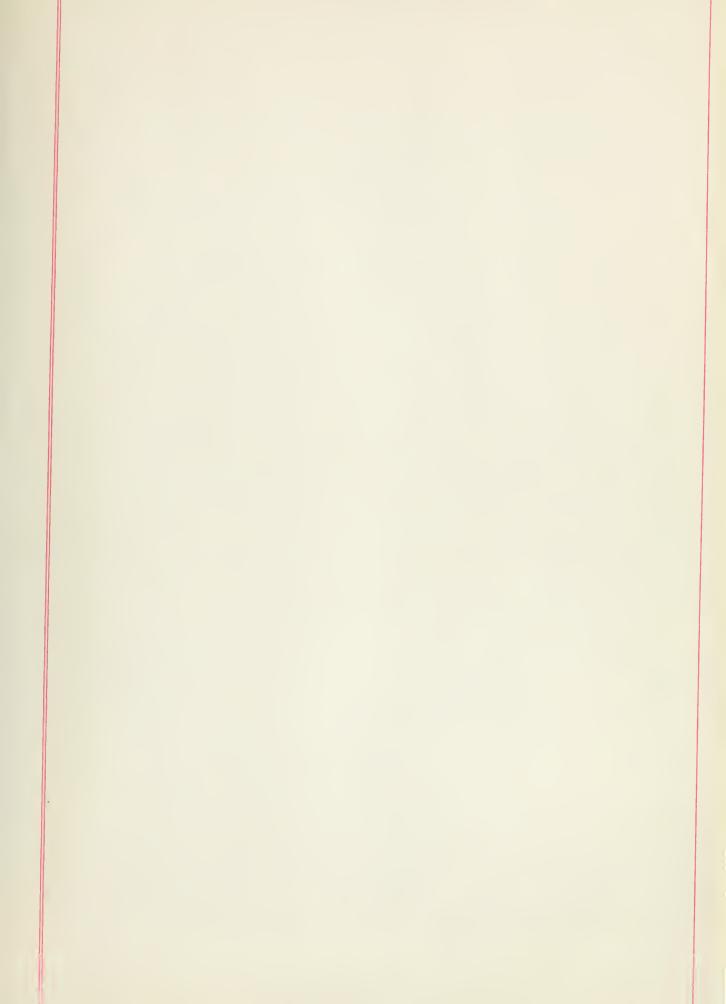
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#### PREFACE

"Controllership in the Private General Hospital versus Controllership in the U. S. Naval Hospital: A Study in Contrasts." However, the preliminary research disclosed that controllership in the private general hospital was virtually unknown and in the naval hospital was undeveloped awaiting trained personnel; controllership was barely beginning at the Bureau of Medicine and Surgery level.

Conversations and interviews with Mr. Victor F. Ludewig, Superintendent of the George Washington University Hospital, Mrs. Maryland Y. Pennell of the U. S. Department of Health, Education, and Welfare, and especially, Mr. J. N. Hatfield, jr., of the Washington Office of the American Hospital Association gave birth to many of the inspirations that resulted in this thesis in its present form. Mr. Hatfield was particularly generous in the giving of his time and advice; by pointing out errors, weaknesses, and offering constructive criticism, he was most helpful. The shortcomings and errors that he has not discovered are my own.

The literature in the field of hospital administration was made available through the kindness of Mr. Ludewig, Mrs. Pennell, Mr. Hatfield, and correspondence with Mr. George Goettelman, Vice-President of Civic Affairs, Society for Advancement of Management,

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all were most co-operative and generous with their personal copies of any periodicals, books, or manuscripts requested.

The modern concept of controllership has won recognition in American industry the hard way, by achievement. Those companies using the controllership concept in their management proved by their growth and efficiency their advantage over those companies who could not see the progress to be gained by adopting it. Hospital administration is a mere "babe in the woods" when compared to modern scientific business management —— it has much to learn, a great resistance to change, and a desperate need for the advantages that will accrue. The controllership concept may be just the starting point but it is an excellent starting point. The more one delves into the problem and all its ramifications the more apparent the fact becomes that hospital administration needs the modern controllership concept.

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### TABLE OF CONTENTS

Chapter	Page
I.	INTRODUCTION
II.	THE NEED FOR THE CONTROLLERSHIP CONCEPT 6
III.	THE CONTROLLERSHIP CONCEPT DEFINED 14
IV.	WIWI CONTROLLERSHIP CAN DO FOR HOSPITAL ADMINISTRATION
V.	WHAT CONTROLLERSHIP CAN DO FOR HOSPITAL ADMINISTRATION (Continued) 38
VI.	CONCLUSION 45
BIBLIOGR	APHY 50

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### CHAPTER I

A review of the literature in the field of hospital administration shows that the profession has made remarkable strides since World War II in such areas as general accounting, cost accounting, budgeting, and methods improvement, but the same review reveals an utter dearth of material in the modern concept of con-Hospital administration is lagging badly in the trollership. adoption of this one tool of management which can bind all the aforementioned areas together into the epitomy of efficiency and good management --- CONTROL. Every hospital, every business, must exercise the controllership function and is, in fact, exercising it every day, right now. But to practice controllership unwittingly, is to operate without tools in a field where craftsmanship is a thing of beauty and a primitive product is a crudity. The function must be carried out; decisions must be made, both in day to day routine and in long range planning; but to operate by intuition, and trust in divine providence for guidance, is to grope through a void where success is hit or miss. It is an amazing thing but the most efficient industries, and businesses of all kinds, where the profit margins are the greatest and inefficiencies could be tolerated with little danger of failure, the practice of

The Index of Current Kospital Literature, The American Hospital Association (Chicago, 1954)

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controllership is an exacting science; but the average hospital where deficits are the rule rather than the exception, the concept of modern controllership is almost unknown, and its practice regarded with the suspicion of the uninformed. It is the goal of hospital administration to provide maximum service at minimum cost, controllership is the key to that goal.

Because of the absence of literature in the field, it is probably best to introduce controllership with basic fundamentals, and from conversations with various hospital administrators locally, basic fundamentals must start with dispelling misconceptions of what controllership is not before proceeding to exactly what controllership is and its utter necessity to hospital administration. Controllership is not accounting Controllership is not budgeting. Controllership is not costing. It is none of these subjects in the sense that a body is not an arm, or a leg, or an organ, Although the concept of controllership could be likened in some respects to a brain; controllership has discrimination, coordination, judgment, and memory. It has the ability to take the raw statistics flowing to it, by its own carefully contrived and purposeful order, from each area and digest, assimilate, compare, and evaluate them to arrive at a recommendation to top management. Note carefully that controllership is a staff function; it recommends courses of action to management. It makes no decisions. it gives no orders, it carries out no line function. It anticipates the need of management for decision-making information in some fields; it follows the order of management for decision-making

James L. Peirce, "Controllership and Accounting -- A Contrast," The Controller, September 1953.

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information in others. Controllership means control and control means action; but in its own field and strictly as a staff function.

Hospital administration must embrace this concept of controllership because, even though there is no "profit motive" as such, the tight rope between deficit and surplus is so thin that increased efficiency is the only method to stay "in the black" or justify charitable contributions or governmental subsidies to eliminate deficits. The foundation of the controllership concept is the budget and statistics show that 48% of all hospitals do not operate within a budget framework. Not even the government can afford to do that. Operating without a budget is operating without a plan; a budget is nothing more or less than a financial plan. A plan of operation expressed in dollars. To operate without a budget is not to know where you started from, where you are, or where you are going. Yet 48% of all hospitals are wandering around aimlessly by attempting to operate without a budget.

The architect of the budget is the controller. Note he is not the builder; he lays down the blue-print, the guide lines. What it looks like when finished depends upon the workmanship of the builders --- it must start from the lowest supervisory level and work up. Only when it has been built in that way will it become a working instrument that is realistic when viewed from the bottom up and from the top down. However, once the budget is approved is when the controller starts controlling. No thought is given to the budget as a pressure instrument; it is a plan,

lA. F. Emich, "Control Means Action", Harvard Business Review, July-August 1954.

<sup>&</sup>lt;sup>2</sup>Statistical Tables, HOSPITAIS, The Journal of the American Hospital Association, June 1955, Part II.

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nothing more or less than a financial plan, and plans are made to to be changed --- providing the change is for the better, is necessary, or is justified. It is in this area that it is expected that the controller will render his greatest service to the hospital administrator.

At this point, the small hospital administrator is about to back off and drop this article with the idea that his hospital cannot afford a controller, his budget (if he has one) can barely provide for an administrative staff that contains a bookkeeperaccountant, secretary-receptionist, and administrator-jack of all But it is not the controller, the man, that is offered trades. but the controllership concept that is offered as a cure for many deficiencies. The administrator may have to be his own controller (he probably is, without realizing it, in institutions where formal controllership is unknown), perhaps the bookkeeper will have to have his horizons broadened to include controllership in his job description. In any case, the detached viewpoint (the true staff function) must be assumed so that management (the administrator or board of trustees) can be advised whether the plan set down at the beginning of the year is being met (budget analysis), the reasons for variance (cost analysis), and the opportunities for improvement (methods analysis). Nor are these the only areas for the controllership concept to function; that is only the beginning.

The budget is the basic necessity, the foundation of all that is to follow. Now what do we expect to get from the budget?

<sup>1</sup> James L. Peirce, "The Planning and Control Concept", The Controller, September 1954

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Three measures of efficiency of operation; first, a comparison with last year's operation, second, a comparison against the current year's planned operation, and third, a comparison against the profession's statistics as a whole. To meet this third factor, the hospital associations must standardize some ten to twenty ratios of operating efficiency similar to the operating ratios that industry uses as standard yardsticks of comparison. Some of these measures are already in existance in the Journal of the American Hospital Association Directory Issue Statistical Section. example. Total Income per Patient Day. Patient Income per Patient Day, and Fulltime Personnel per 100 Patients are statistics that are a start in that direction, but in analyzing the statistical tables offered each year from 1950 to 1954 we find that although the tables are interesting in giving the overall composite picture of facilities present in hospitals and therefore a basis of comparison of facilities, however, tables that would be of aid in comparisons of economy and efficiency are few and far between. This in itself shows a remarkable unawareness throughout the field in the modern controllership concept, and a broadening of horizons to include this area is one of the urgent needs of top management in hospitals.

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#### CHAPTER II

### THE NEED FOR THE CONTROLLERSHIP CONCEPT

The corporation of today is rapidly assuming the samaritanism and altruism of the hospital in its growing tendency toward the sense of public service and civic mindedness. The day of the philosophy exemplified by "the public be damned" has long since gone and the day is rapidly approaching when all corporations recognize consciencewise that they have responsibilities to the community as well as the stockholder. Hospitals, on the other hand, are following the converse of that trend much more slowly. The hospital of today could well borrow the efficiency and economy of the modern corporation; the gulf between the two is steadily growing smaller --- the common ground is steadily becoming greater. corporation feels a civic responsibility that manifests itself in support for community charities, education, and the arts, the hospitals' dedication to service regardless of cost or ability to pay should not blind it to the fact that it is a "service industry" in every sense of the word and efficiency and economy can provide more service at less cost. The motivation and dedication my differ but the end product is essentially the same --- maximum product for In industry this is the goal to maximize profit minimum cost margins, in hospital administration this is the goal to maximize

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The first step in developing the modern controllership concept in hospital administration is to eliminate some of the old narrowness of viewpoint prevalent because of the specialized training of many of the hospital administrators. In the beginning, we have to see the forest and evaluate that for length, breath, and height --- then we can move in to examine the trees minutely. Just as in industry, the successful corporation president must learn to suppress the emphasis and interests of his background, the hospital administrator must learn to suppress his (or hers). It is only human nature to spend the greatest amount of time and energy on the phases that interest us most, or those which by training or experience we feel most familiar or sure of ourselves with, to the neglect or detriment of various other phases of the multi-facet job of administration. The corporation president might have come up the ladder of responsibility through the sales organization, production, distribution, or finance but he cannot let his former loyalties, interests, or experiences divert him from his overall viewpoint. Once the prime managerial responsibility is reached, the petty jealousies, pressure points, and selfish interests of the narrow viewpoint of a phase or department

AND REAL PROPERTY AND PERSONS ASSESSED AND ADDRESS OF PERSONS ASSESSED. Let all come of the second of and the second section of the second section s . The second sec and the late of the comment of the contract of the late of properties of the transfer of the state of t the state of the later of the state of the s the same and a super- to deside the living of the public the fact of the common state of the common sta man and the contract of the co And public to the control of the con

must go to be replaced by the ability to view impartially the operation as a whole. The analogy is the same in hospital administration. The administrator must eschew the former background of medicine, nursing, accountancy, dietetics, or what-have-you and truly see the operation as a whole, as an impartial administrator. There is no better way to do this than in the controllership concept.

Just as in the introduction, it was the controllership concept, not the man called the controller, we were discussing; here, it is the controllership concept, regardless of the name various authors attribute to the function depending on their own personal background. The cruz of the matter is that all of these authors recognize the need for the function and describe it accurately (if somewhat narrowly) to fit their own individual empire; but the function is a necessity, all these authorities agree on that.

For example:

A second function of cost accounting is the accumulation and utilization of cost data for the purpose of controlling costs. The objective is to maintain costs at the lowest point consistent with the most efficient operating conditions. It requires the examination of each cost in the light of the service or benefit obtained so that the maximum utilization of each dollar will be obtained. It requires planning in the form of flexible budgets, and the best results are generally obtained from the use of standards as a means of determining what material, labor, and overhead costs SHOULD BE for each department, job, group of workers, individual worker, and type of product.

or perhaps this example:

....ne company, small or otherwise, can exist without some form of (a) planning, (b) forecasting, (c) job analysis or job estimates, (d) accounting, (e) statistics,

Blocker and Weltmer, Cost Accounting, Third Edition, McGraw-Hill (New York 1954) p.3

(f) reports, (g) management research (special investigations), (h) appraisal audits (even if made by the owner of a small business in person), (i) internal control, (j) organization, and (k) basic company policies.

The control unit is new as a separate important top management tool. It is the latest step in the evolution of managerial controls. It is simply the gathering of all these activities into one coordinated unit under the supervision of a top executive. places new emphasis on these functions, acknowledges their importance, and usually results in substantial economies in the costs of effecting proper control of the business. Duplication of effort, work at cross purposes, overemphasis on the importance of one function Erroneous at the expense of another are eliminated. interpretations or lack of unity of purpose, which can happen unintentionally when two people examine the same situation independently, are eliminated. The whole flow and channeling of control data from source to directive action is coordinated under uniform guidance and without extraneous motion.

### and now this final example:

Management must provide, maintain, and effectively use the necessary force of qualified employees, the equipment and facilities peculiar to the enterprise, and the necessary supplies, materials and services involved Also, management must provide and in a going concern. maintain safe and sanitary working conditions. It must establish and maintain equitable compensation procedures, and practices for the organization to perform its necessary daily activities. It is necessary for management to establish, determine and to enforce, in compliance with the required standards controls, instructions and specifications involved in the activity of a going organization. Management must develop and improve whatever necessary products or services are involved. It must plan and direct the operation in a manner that coordinates all the various and related activities directed toward its purpose. It is necessary for management to be able to supply those goods and services sought by castomers. Not least, but last on the list, is the problem of managing, controlling, and protecting the assets, finances and accounts of the going concern, what ever its nature may be.

It is in the fulfillment of these particular chores, duties and functions that the concept of scientific man-

Lamperti and Thurston, "Internal Auditing for Management"
Prentice-Hall, Inc., (New York 1953) p.93

<sup>2 &</sup>lt;u>Ibid</u>. p.95

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agement makes its particular contribution.

No management, whether it be an industrial organization, a fraternal organization, or a hospital, can default in the proper performance of any of these functions without disastrous results. It is through a study of the successful application of these functions in other organizations that hospital administration in particular can benefit the most from designing an approach to its own problem areas.

There we have three different references' views of the control function. The three authors are each espousing a different cause; one is a text on cost accounting, one is a text on internal auditing, and the third is a magazine article on scientific management. However, no matter who is clutching this function unto his bosom and claiming it for his very own, whether it is the cost accountant, internal auditor, management engineer, or controller, the function of analysis, comparison, discrimination, and judgment is universally recognized as an essential one, indispensible to efficient management and yet so sadly lacking in hospital administration today.

It was not too many years ago that charities, whether church sponsored or otherwise is immaterial, did their works of philanthropy guided by social "do-gooders" and men of the cloth who, although motivated by the highest ideals and good intentions, rarely were examples of efficiency, organization, and economy in that maximum utilization was made of each dollar collected. A good part of it was frittered away in overhead and other pigeon-holes before the purpose intended was ever gotten around to. It is not so today; our national charities are models of organization

<sup>1</sup>Schoeller and Anyon, "Scientific Management in Hospital Administration", Advanced Management, January 1956 p.23

and efficiency by engaging the best business management obtainable and employing the most modern concepts of corporate methods. By breaking with tradition and organizing along business lines, employing professional talent in fund raising, organization, finance, and even disbursing —— the charities lost nothing in stature; they did not abase themselves with crass commercialism, but rather, they grew in size by their own efficiency and gained in reputation by the philanthropic works they could accomplish by getting vast sums collected and the maximum good out of the money collected and disbursed.

Hospital administrators and others concerned with hospital administration should be in the fore, pressing for the view-point that hospitals are "big business" --- non-profit, if such is the case --- but business nevertheless. The average hospital administrator generally feels that he must rise to the occasion to defend the commonly accepted connotation that hospitals are agents of mercy untainted by commercialism. Administrators of that ilk are always wondering where the money is coming from, where the money went, and exactly what consumed it. A business connotation is not evil, per se; the hospitals that are models of business efficiency are rarely the ones associated with penury or the kind of commercialism characterized by excrbitant charges, acrimonious prepayment demands, elaborate and provoking safeguards for insurpayment, and constant dunning. The hospital that is practicing controllership can afford to be completely open handed in pricing its services since it knows exactly what the service costs

<sup>1</sup>H. M. Cardwell, "Determing Charges --- The Lifeline of the Hospital", Hospital Accounting, April 1953 p. 10

the contract of the first terms and the contract of the first terms and the first terms and the first terms and the first terms are the first terms and the first terms are the first term

and can justify the charges made. The facet is becoming increasingly important in the present day hospital plans where a third party organization, very much concerned with the reasonableness of the charges, and having a wide basis of comparison, is paying The hospital that is practicing controllership is the bill. operating under a capital budget, revenue and expediture budget, and a cash budget, all coordinated to smooth the cash flow situation so that the frantic aspect of the collection side is nonexistent as compared with the "feast or famine" cash situation of the non-controlled hospital. Hospital receivables should be no different than those of any well regulated department store accounts; the "average collection period" can be calculated, the non collectables can be estimated and provided for, and by the simple application of standard business procedures public relations are not impaired by the irritating methods dictated by urgency and This can be accomplished only where controllership necessity. has the receivables analyzed and under control, and where the cash budget has the cash flow coordinated with the collection of the accounts receivable.

In concluding the case demonstrating the pressing need for an awakening to the modern controllership concept in hospital administration, which has long been overdue, another quote from the poignant article by V. D. Schoeller and G. J. Anyon is apropos:

The hospital BUSINESS, if it can be so termed, is said to be America's fifth largest industry. In no other business is there such a volume of paperwork and detailed record-keeping in connection with its clientele. In no other business

<sup>&</sup>lt;sup>1</sup>Frederick Grubel, "Hospital Finances and the Medical Staff", Hospital Accounting, October 1953 p.10

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do there exist more methods and systems that have been outmoded and changed long since in other businesses.

Another argument posed by those who feel hospital administration is different is the fact that the hospital is not generally a profit-making organization and as such the human motivations and the drive for profits do not exist to the same extent as in an industrial organization. First of all, let us recognize the fact that hospitals are organizations working with limited resources in an exchange economy. They have the problem of nurturing their capital just as a profitmaking organization does. Secondly, where profit may be the first consideration of an industrial organization, the first consideration of a hospital is more healthy people in the social structure than are possible with a minimum capital investment.

In order to properly allocate its capital resources a hospital must ulitize the same techniques as an industrial organization, such as work measurement, budgetary control, planning and organization, control of operations, space utilization and control, and where the profit and loss statement in the end is the final and ultimate measurement of the success of the business organization, in the hospital the number of patients per dollar invested is in reality a profit and loss statement. The nuturing tools of capital utilization are identical in both instances.

V. D. Schoeller and G. J. Anyon, "Scientific Management in Hospital Administration", Advanced Management, Jan 1956 p.22

<sup>2</sup> Ibid. p.24

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#### CHAPTER III

### THE CONTROLLERSHIP CONCEPT DEFINED

James Forrestal once said, "Good organization comes from the energies of men, from good will, from confidence and teamwork, from broad understanding of great problems, and the willingness to spend a good deal of attention on details." For a "broad brush" treatment of the subject, it could be a definition of controllership, especially the last two characteristics. No single item of technical competence can be more important than being able to see the overall problems and objectives of the corporation (or hospital) and the willingness to dig deeply through a morass of details to find the solution is the other side of the coin. the solution to the problems of an organization are obvious, the management should hang its head in shame for allowing them to persist without remedial action, but if we assume that management is properly motivated and technically competent in the arts as well as the sciences of management, then it follows that the ills of an organization are subtle and obscure. If that is the case, the controller, and the controllership concept, can be an invaluable tool of top management in analyzing, diagnosing, and offering several courses of remedial action, with the projected consequences of each, to the chief administrator for a decision. other hand, if we assume the opposite, that is, that the top man-

THE RESERVE AND PARTY AND PARTY AND PARTY AND PARTY AND PARTY. The second limit is not a second or the second of the second or the seco The course of the state of the latter of the state of the mentions of the subsection of schools at the testing and object to the common of the published published with and another common but he starting at the salting the salting of the salting and salting the salting the salting and salting the salting t which had be been water and had madelled by but budy at \$25 and at the second of th the party had been the out about his basic had been about the same of AT THE RESIDENCE OF THE PARTY O plant to be a set of all designment of the content of the latest the second or gift and cook matted at mile about the second at an and the field in the state of the last the court of and the state of the control of the second s AND ASSESSED AND ASSESSED ASSESSED ASSESSED ASSESSED. The second of th of the content of the word of the year of the constant of the consta agement is not properly motivated or competent, then there are two ways of looking at the situation. One way of looking at it is, that a controller is not the answer; such a management would not use a controller any more than it is using any other management tool at its disposal. It, the management, needs replacing. Another way of looking at it is, that such a management needs a controller more than anything else —— to accomplish its own function and carry out the top management function too.

Let us take a look at just exactly what this controllership concept is that we have been talking about. The term has
been tossed about rather blibly and the time has come to define it
precisely, pick it apart minutely, and apply it to hospital administration specifically. There is probably not any better starting point than the concept of the function of controllership as
developed by the Controllers Institute's Committee on Ethics and
Eligibility Standards. This concept was approved by the National
Board of Directors on September 25, 1949 and stated:

The concept of the function of controllership is

- 1. To establish, coordinate and maintain, through authorized management, an integrated plan for the control of operations. Such a plan would provide, to the extent required in the business, cost standards, expense budgets, sales forecasts, profit planning, and programs for capital investment and financing, together with the necessary procedures to effectuate the plan.
- 2. To measure performance against approved operating plans and standards, and to report and interpret the results of operations to all levels of management. This function includes the design, installation, and maintenance of accounting and cost systems and records, the determination of accounting policy and the compliation of statistical records as required.
  - 3. To measure and report on the validity of the

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objectives of the business and on the effectiveness of its policies, organization structure and procedures in attaining those objectives. This includes consulting with all segments of management responsible for policy or action concerning any phase of the operation of the business as it relates to the performance of this function.

- 4. To report to government agencies, as required, and to supervise all matters relating to taxes.
- 5. To interpret and report on the effect of external influences on the attainment of the objectives of the business. This function includes the continuous appraisal of economic and social forces and of governmental influences as they affect the operations of the business.
- 6. To provide protection for the assets of the business. This function includes establishing and maintaining adequate internal control and auditing, and assuring proper insurance coverage.

This then is our starting point. It is truly amazing how this definition of the concept, originally conceived and set down with only the industrial corporation in mind, will fit into place and fill an urgently required need in the hospital organization.

panded within the same framework or condensed and still cover much of the same ground depending upon whether we desire to itemize each and every duty generalized in it or whether an oversimplification to the barest essentials is desired. One author in the field does both; you can have your choice of seventeen duties of a controller or you can have just three broad objectives of controllership, depending upon the needs of the organization and the personality and ability of the person fulfilling the controllership function.

D. R. Anderson, "Practical Controllership", (Chicago: Richard D. Irwin, Inc., 1949) p.3

Reduced to the barest essentials and at the risk of oversimplification the three objectives of controllership become:

- 1. Control and protection of the assests of the business
- 2. Compliance with legal reporting and record-keeping requirements.
- 3. Assistance to management in controlling operations and formulating policies.

It can be seen that somewhere between these two definitions of the controllership concept there is some common ground for a meeting of the minds in any sized hospital from a ten bed hospital in a small town to a one thousand bed plus medical center. This concept is a state of mind never exploited or quickly dis-It is difficult to believe but missed by most hospitals today. nevertheless a fact that this idea of the place and function of the controller in top management organization had a difficult time finding acceptance in American industry, but in view of the outstanding success it achieved where accepted, the resistance and reluctance to use the controllership concept in hospital administration is an enigma. This concept is flexible but management must want to embrace it; management must want to know where it is going, how fast it is getting there, and where it stands on the way. Let us look at it this way:

which have been termed for convenience the "property control," "legal," and "management" functions —— are really quite distinct, even though they all stem from the one broad function of record-keeping, and that each of them may call for different types or forms of secondary or summary records, though all must depend on the same primary

<sup>1</sup> Ibid. p.6

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or original records. Even more important is the fact that the most effective discharge of each of these functions requires a different approach, a different habit of thought, and a different attitude of mind. does this mean to the controller? In a small organization, where he must necessarily span all of these functions personally, it means that he must recognize his problem and be versatile in his attitude and approach. In larger organizations he may surrender one or two of the three functions, or, if he spans them all, he must maintain versatility of approach himself and must have versatility of abilities in his organization, particular-ly in his direct assistants. The best solution of the problem in any particular company will depend on the form of its internal organization and the abilities of the available personnel, but these are fundamental questions which the controller of any sizable company is likely to encounter in orienting, himself within his organization and defining his job.

This should make it quite obvious that the controllership function can be fitted to any organization; it is a way of business life, a way of conducting a business, a way of managing an enterprise; a way of controlling an organization so that every phase of it, past, present and future can be fitted into a master plan. It is the difference between attempting to operate by doing the best one can on each situation as it comes up and operating with a standard of performance, a long range policy, and an internally publicized progress report. Everyone then knows the objectives and the progress made in reaching them. The information is a powerful cohesive force in meeting what must be a teamwork goal.

Nomatter if the administrator has a staff of hundreds, or if he is a one-man band, jack of all trades; somebody must exercise the controllership function, that of objectively appraising the goals and the progress toward them, measure the efficiency

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against standards, both self imposed and industry-wide, and perform the myriad statistical demands required by government, professional associations, and good management.

We have all seen the horrible example of cities and towns outgrowing their hospital facilities until they have beds in their passageways. Did the management (board of trustees as well as administrator) have an awareness that in x years hence, by census statistics and local Chamber of Commerce growth trends, the local population would be y persons who would need z facilities? A pure statistic, but a controllership function under the duty "to interpret and report on the effect of external influences on the attainment of the objectives". Yet how many times does the growth of the community overwhelm the hospital that adequate planning could have provided for. In a simple problem such as growth and expansion, the solution from the controllership concept starts with putting a projection of the demand for the product (in this case, hospital facilities) before management for a decision on whether to expand to meet the demand or invite somebody else to meet the new demand. If the decision is made to keep pace with the demand, that starts the planning to provide the funds in x years for z fac-Or the financial plans can be presented along with the demand projections as a basis for reaching a decision. Every external change, a rise in the per capita income, an industrial influx, a change in the doctor-population ratio, or a change in the hospital bed-population ratio are all statistics that need constant analysis, digestion, and presentation by the controller to

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top management. Whether it is by the administrator himself to the beard of trustees, or by the accountant to the administrator, or by a controller and a full staff of statisticians and analysts to management, somebody must fulfill the function and control by planning and looking ahead. And while we are looking ahead, a backward look at regular intervals is important; the trends and cycles become very obvious when looking at and comparing past performances.

One of the most essential aspects of a controller's duties was expressed by William Vatter in the introduction to his book, which shows in retrospect how controllership spread-cagles the field, one cannot get into the broader concepts of any of the associated field of auditing, cost accounting, management engineering, or even managerial accounting without embracing controllership --- and the reverse is equally true. Professor Vatter says:

Quite apart from the techniques of accounting and the uses of specific reports to meet managerial needs, this book is directed to some extent toward familiarizing the reader with the quantitative aspects of the business. To put the matter bluntly, one of the things here aimed at is to promote quantitative thinking -- the kind of analysis and interpretation that is required to make figures meaningful; but this also implies that business figures must be kept from being considered the "brute facts" that they may appear to be. One of the purposes of this book is to help the reader bridge the mental gap between dollars and cents shown in accounting statements and reports, and the things that are the real substance of managerial action. Quantitative thinking is partly a matter of being able to use figures, but it is also a matter of maintaining a clear perception of what the figures really mean.

.....One of the basic functions of accounting is to report independently on the activities of others, so that information concerning what has happened may be

W. J. Vatter, "Managerial Accounting", (New York: Prentice-Hall, Inc., 1954)

<sup>&</sup>lt;sup>2</sup><u>Ibid</u>. p. 5

relevant and unbiased. The major function served by both public and managerial accountants is to use their independent judgment with complete freedom; thus they may observe and evaluate objectively the fortunes and the results of enterprise operations. In this, the accountant cannot have a vested interest or a prejudice in favor of, or against, the decisions that have been made; the rightness or wrongpess of situations and results is not for him to judge.

What Professor Vatter is saying about accounting is the concept of controllership that has been the central theme of this However, before hospital administration is ready to discourse. adopt any system or concept that has any connotation of business efficiency it must first overcome the ingrained resistence to change and the prejudice against the word 'business' when used with In attempting to avail myself of all the literature in the field that was obtainable, a search was made of the articles listed in the Index and when an article was discovered entitled "Why don't you run a hospital like a business?" it was thought that pay-dirt was struck. But that thought was short-lived; the article was a burlesque on the thought that a hospital could be run as a business, a complete 'reductio ad absurdum' treatment of a completely rational thought that business efficiency and methods might have application in the field of hospital administration. It is that reactionary resistance that must first be overcome before any consideration of the controllership concept will fall on fertile ground.

Books have been written on just what is controllership and this particular treatis can do little more than touch the high spots and perhaps whet the appetite of the uninitiated to pursue

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some of the basic writings in the field. In this regard, a brief but authoritative survey of comptrollership or controllership can obtained by a perusal of the following: Chapter I, Practical Controllership by David R. Anderson, controller of the Kendall Company; Chapter IV, Controllership in Modern Management, edited by T. F. Bradshaw and C. C. Hull; and Part I, Controllership by J. B. Heckert and J. D. Willson. These writings will open new horizons to the hospital administrator whose exposure to controllership has been limited, they are highly readable texts that can do far more to explain controllership than can be done in a brief treatis such as this. This treatment of the subject must move along to explore exactly what controllership can do for hospital administration.

#### CHAPTER IV

#### WHAT CONTROLLERSHIP CAN DO FOR HOSPITAL ADMINISTRATION

All the wordage that has gone before has been merely an introduction to the basic tenet that hospital administration needs the modern controllership concept, and what better way could this tenet be proven than an unfolding of what this concept can do for the hospital administration field, and leave the reader to judge whether a management tool that can accomplish so much is a need or not.

The various techniques that make up a good part of controllership are not strangers to the competent hospital accountants and hospital administrators. For example, an excellent article on "Preparing the Hospital Budget" appeared in late 1953 which shows that in some hospitals the annual budget has advanced to a point comparable to that in the most efficient industrial corporations. However, a technique such as demonstrated in that article is totally unknown in over 90% of the so-called "modern" hospitals and approximately 50% of all hospitals have no budgets of any kind whatever. If that is the situation with budgeting, it is probably a good thing that the embarrassing statistics on the number of hospitals using as a standard management technique a true cost

Russell C. Nye et al, "Preparing the Hospital Budget,"
HOSPITALS, Journal of the American Hospital Association, Dec 1953.

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accounting system, a periodic management audit, a work simplification survey, or even an internal and public accounting audit are These facets of controllership only scratch the not published. surface, the hospital administrator must want to control his operation using every tool of good management known to industry today. It is a good and healthy sign that the large business machine manufacturers are promoting among their machines models specifically designed for hospital administration; the purchase of every machine and system shown in the catalog is not controllership, but the intelligent use of the information that these machines can compile while doing their daily routine is one of the first steps toward control of the operation. Not that it cannot be done by hand as well, that is not the point; it is the analysis, interpretation, and projection that are the elements of the controllership function not the mechanization, compilation, and presentation.

The controllership concept in hospital administration should start with the long range objectives of the hospital. To control the operation intelligently, the controller must know the ultimate end toward which he is directing his course. But stop one minute to recollect, has the Board of Trustees ever set a long range objective for the hospital, and has it been published, at least to the management? Does the administrator know what the long range objectives of the hospital trustees are? The successful hospital does not "just grow like Topsy", it is the result of long range objectives being met. Vision and foresight are indispensible for the Board but communication to management is just as important.

The hospital should have a long range plan --- both financial and objective --- extending as far into the future as ten to twenty-five years. Of course, this plan can have little detail but it is the foundation stone and the framework that will be filled with each annual budget and even day to day operational decisions will play a part in filling it in. The long range plans naturally contain the expansion decisions. Is the hospital to maintain its present size in the face of an expanding com-Is the hospital to expand its facilities to meet advancing demand? Is the present location to be maintained over the long range plan? Shall a fund be established out of retained earnings as the method of financing the long range plans? should they be financed by charitable fund raising drives and donations, or borrowing? In addition to the longest range plans concerning eventual location, size, buildings and facilities, a semi-long range set of plans covering major changes to present plant should be drawn up in a little greater detail. In that plan, usually envisioned for from five to ten years, are projects such as new wings to existing buildings, rebuilding a surgery, air-conditioning the existing buildings, installation of costly equipment such as radium treatment rooms, and perhaps the establishment of a nursing school or clinic. The lines are not sharply drawn; what is a major equipment acquisition involving a five year planning procedure for one hospital might be a routine annual capital budget item for another. Long term, near term and current are planning terms that are nebulous and flexible,

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they have different meanings to different organizations depending on size, state of finances, condition of plant and equipment, and efficiency of management, but something other than a day to day basis of planning must exist, and be known to all levels originating plans, if the organization is going to stay on a fixed course toward a pre-determined destination.

Within the framework of these stated long range objectives, the current year's operating budget must fit as a day's journey in a long trip. Whether that day's journey is going to be rough going or smooth sailing, is going to be progress in the right direction or blown off course, is going to be great and rapid strides toward the goal set or a snail's pace will depend largely on the soundness and thoroughness of the preparation for the trip, the organization and personnel to meet the conditions encountered, and the efficiency with with the conditions are recognized and surmounted. The controller and the controllership concept are the hospital administrator's navigator on the day's journey as well as the long trip. Once top management has decided where it wants to go, the controller can tell it the courses open to it, recommend the best way to get there, and make continuous reports on how much progress has been made towards reaching the destination.

It is not the intention of this treatment to delve into the mechanics and techniques of budgeting. The need for a budget should be by now apparent; the "how-to" phase can be found in several good articles and texts. The article by Russell C. Nye

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and others that was previously cited is excellent for a short range (one year) hospital budget. Other good reading in the how to field is William J. Vatter's book "Managerial Accounting" (Chapters 5 through 10) and W. Rautenstrauch and R. Viller's book "Budgetary Control"2. The bibliography listed at the end of the latter book is a complete survey of the field of budgeting and the titles of some of the articles listed should be provocative enough to instill some locomotion in a progressive hospital administrator, controller, or accountant. Note just a very few samples of the articles listed: "Budget --- A Tool of Coordination and Control". "Expense Control through Use of Variable Budgets", "Simplified Budgeting for Small Companies", "Variable Budget Control is the Key to Cost Reduction", "Budgetary Control as an Aid to Management", "Using Budgetary Control as an Operating Plan", "Flexible Budget for Cost Control; How Do We Start?", and "Dynamic Budgeting for Cost Control".

From budgets let us turn to another function of the controller, the interpretation of operating results. It has already been stated that one of the most important means of interpretation is comparison; comparison three ways, with last year's operations, with this year's planned operation (the budget), and with the operations of others. Comparison with last year's operations is open to almost any hospital organization if they are keeping the

W. J. Vatter, Managerial Accounting (New York: Prentice-Hall, Inc., 1950)

<sup>&</sup>lt;sup>2</sup>W. Rautenstrauch and R. Villers, <u>Budgetary Control</u> (New York: Funk & Wagnalls Co in association with Modern Industry Magazine, 1950)

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barest minimum of records required by financial accounting, however most of the figures that would mean anything at all in controlling the hospital's efficiency would require something more than the minimum. Controllership's function is controlling while there is still time to take corrective action, not when the accounting figures are a matter of historical interest and record. the comparison must be timely against statistics of relatively short periods. Monthly figures require more work than quarterly. daily figures and weekly summations require more work than monthly. but the benefits are obvious; the conditions are brought to light while there is still time for correction. On the other hand, the benefits of timeliness must be weighed against other factors such as size and work-load of the staff and the actual use to be put of the statistics compiled. This point will be expanded shortly.

While any hospital can make comparisons with last year's operation, only a hospital that is operating on a budget can make comparisons with this year's planned operation. It is of the utmost importance to know whether the cash position of the hospital is better or worse than the planned status. Hospitals, in general, run so close to the line of being cash starved that the planned cash receipts versus planned cash expenditures trends must be carefully analyzed if embarrassment is to be avoided. In other phases also, comparisons with the year's budgeted plans are of paramount importance. For instance, in a rough breakdown of Daily Operating Expenses by departments it becomes apparent that

How's BUSINESS with the American Association of Hospital Accountants, Hospital Management, a department published monthly.

that 64% of the total expense is concentrated in just four departments; Nursing roughly 30%, Dietary 15%, Administration 11%, and Plant Operation 8% with five other departments (Housekeeping, Operating & Delivery Rooms, Pharmacy, Laboratory, and X-Ray) accounting for only 4 - 7% each of the total. It is a perfect opportunity to control efficiency and expenses on a departmental budget basis. (See Vatter, Chapter 8).

All the foregoing is now practiced by roughly half of the hospitals in the United States to a greater or lesser degree. Some organizations operate a successful budget method without a cost system; this is possible since the budget is conceived only in terms of planning, not in terms of controlling. However, when it comes to a comparison between a particular hospital and the entire hospital "industry" we come pretty close to either an utter void or data that is pretty circumspect, in that, the uniformity of hospital accounting is a far cry from reality and unless we are reasonably sure that the same expense is treated the same way in each hospital, the statistics reported are pretty unreliable. In fact, it is extremely difficult to get the statistics desired at all.

What hospital administration needs is a set of statistics for the hospital controller, published periodically (annually, at least, oftener if demanded), similar to the fourteen ratios now published annually by Dun and Bradstreet, Inc., in the monthly magazine Dun's Review and Modern Industry. These ratios are compiled for seventy-four mercantile and manufacturing industries of the United States and a counterpart would be of just as great value

to hospital administration. The background and meaning of these fourteen ratios is completely explained in Roy A. Foulke's book "Practical Financial Statement Analysis" and Dun's Review annually, about October of each year, prints this table entitled "Table of Fourteen Important Ratios with Interquartile Range for 74 Lines of Business Activity". These fourteen important ratios are:

Current Assets Current Liabilities	expressed	as	number	of	times
Net Profit Net Sales	11	11	percent		
Net Profit Tangible Net Worth	Ħ	Ħ	percent		
Net Profit Net Working Capital	10	Ħ	percent		
Net Sales Tangible Net Worth	11	11	number	of	times
Net Sales Net Working Capital	et	11	88	H	11
Average Collection Period	11	11	Ħ	11	days
Net Sales Inventory	Ħ	11	11	11	times
Fixed Assets Tangible Net Worth	88	11	percent		
Current Liabilities Tangible Net Worth	- 11	11	percent		
Total Liabilities Tangible Net Worth	11	Ħ	percent		
Current Liabilities Inventory	87	n	percent		
Funded Debt Net Working Capital	ŧŤ	11	percent		

Roy A. Foulke, Practical Financial Statement Analysis, (New York: McGraw-Hill Book Co., Inc., 1945)

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These ratios are compiled from the annual reports as promulgated by the companies and the common denominator of all these reports is that they all meet the regulations of the stock exchanges, the SEC, the ICC, and are certified by the Certified Public Accountants who conducted the audit that they are "in conformity with generally accepted accounting principles", which for the purposes of this discussion only stresses the uniformity of concept of each statistic presented. The companies can compare themselves with the rest of their industry and see exactly where they stand, as the interquartile ranges are published, and should they desire to compare themselves against an absolute standard instead of a relative one, the text by Foulke previously noted carries a standard for each ratio which is also a basis of comparison.

The central information clearing agencies and associations of hospital administration can do for the hospital field what Dun and Bradstreet is now doing for manufacturing and mercantile industry. The magazine "Hospital Management" publishes each month a set of statistical tables, by regions and size of hospital, entitled a "How's Business Report". This is excellent as far as it goes. Its main feature is the breakdown of Operating Expenses per Patient Day by departments. It also gives three important ratios that are extremely important in any comparison between hospitals: Percent of Occupancy, Operating Income per Patient Day, and Operating Expense per Patient Day.

It is desirable to go further than that. In 1951, the United States Department of Health, Education, and Welfare made a statistical study based on figures compiled by the American Hospital Association that resulted in the publishing of a phamphlet entitled "Income and Expense Ratios of General Hospitals". digest version of the same study was presented as a magazine article. In the course of this study the government statisticians worked out ten ratios which, if done annually or semi-annually, from consistant accounting procedures could be of tremendous value to hospital accountants and controllers for comparison, both on an industry-wide basis and internal analysis. For internal analysis. these simple ratios should be calculated monthly and charted for easy detection of significant changes and trends. Nor is it envisioned that the controller, accountant, and administrator would be the only persons interested in these statistics; the medical staff could also cast an analytical eye at the "Length of Stay" ratio should any change or trend appear; the Board of Trustees might find them the basis of interesting inquiries and discussions.

Conservatively, it is estimated that 95% of the hospitals today make no effort to compute these ratios for management analysis. However, if the publishing of these ratios by a trade magazine with industry-wide stature or a journal of one of the hospital associations caused hospitals to compute them either as a ser-

Pennell, M. Y. and others, Income and Expense Ratios of General Hospitals, 1951, Public Health Service Pub. No. 407. Washington, D.C., U. S. Government Printing Office, 1954.

Pennell, M. Y. and others, "Hospital Income and Expense Ratios, 1951", Public Health Reports, Vol 69, No. 10, October 1950

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vice for contribution to an industry-wide standard, or for comparison, even if they did not contribute the statistics, or even if they merely computed them periodically for internal management, the hospitals of the United States would have a new tool for efficient operation.

The ten ratios computed by the statisticians of the U.S. Department of Health, Education, and Welfare were:

Occupancy rate	test.	100 x average daily census beds
Length of stay	=	365 x average daily census annual admissions
Total income per patient day	200	total income 365 x average daily census
Patient income per patient day	640 640	patient income 365 x average daily census
Percent of patient income of total inc	=	100 x patient income total income
Total expense per patient day	==	total expense  365 x average daily census
Payroll per patient day	22	payroll 365 x average daily census
Percent payroll of total expense	=	100 x payroll total expense
Full-time paid pers per 100 patients	80	100 x personnel average daily census
per day Percent deficit or surplus of total expense	=	100(income - expense) total expense

Note that three of the ratios deemed significant by the government study are already computed by the "Hospital Management" statistical tables, however there is a tremendous amount of useful information to be gained if the two sets of statistical data are

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combined. Only three conditions have to be met for this to become a reality; first, an agency, association, or magazine must undertake the responsibility to act as a clearing house and compiler; second, the hospitals must actually want these statistics for practical use, and their desire to have these statistics will be the incentive to make them prepare the data that they send in with the same meticulous care that they hope other institutions are giving to the data they are submitting; and third, for the statisties to really mean anything, all hospitals using them must be using the same basis of computation. If all were on the same chart of accounts, the results would of necessity be on the same basis, however the ratios proposed are so simple and easy to interpret that the expense percentages now compiled by "Hospital Management" would be more susceptible to variation between institutions than these ratios when a few simple ground rules are laid down.

One of the amazing features of these ratios is the fact that so much can be gleaned about the financial health and efficiency of the institution from ten ratios made up from only eight fundamental factors, the figures for which should be readily available in any hospital without any further compiling or calculating. In all ten ratios only these eight factors are used; Average Daily Census, Number of Beds, Annual Admissions, Total Income, Patient Income, Total Expense, Payroll, and Number of Full-time Paid Personnel.

Exactly what would these ratios give a hospital administrator?

A basis of comparison —— nothing more, nothing less.

But he would have a reliable yard-stick to measure himself against and attempt to reconcile his variance with. For example, if his own hospital's surplus was steadily decreasing an analytical study of the ratios might pin point the unbalancing factor without too much digging. If the occupancy rate was showing a downward trend total expense per patient day would have to be held as steady as possible; if it was rising and the payroll per patient day was rising also and, of course, the full-time paid personnel per 100 patients per day was up too, it would not take too profound an analyst to see what had to be done to try to keep total expense per patient day in a steady or downward trend.

Upon first adopting these ratios every effort must be made to use every management tool available to bring total expense per patient day into a downward trend until it is leveled off at an irreducable minimum; if that does not provide the surplus necessary to carry out the long range plans of the hospital, then the total income per patient day must be worked on to provide it. It may mean working on percent patient income of total income or other means, but the simple fact is that the plan must be met or changed to something that can be met. As the U. S. Department of Health, Education, and Welfare stated it:

Such analysis indicates the primary distinguishing characteristics of hospitals which have relatively high or relatively low per diem costs and of those which have deficits or surpluses. These ratios by themselves do not explain why costs are high or low or why deficits or surpluses occur in specific hospitals. Detailed study of each hospital's program and financial structure would be required for that purpose. Analysis of variation among groups of hospitals, however, does provide

a basis for development of important generalizations and a framework by which an individual hospital may evaluate its own position.

High expense per patient day is an outstanding characteristic of hospitals with deficits. When compared with hospitals of similar size with surpluses, those with deficits have low occupancy rates, long duration of stay, low income from patients per patient day, and high per diem expense for both payroll and other expenses.

In each size group, occupancy rates are higher in the hospitals with a surplus; they are consistently lowest in the hospitals with the greatest deficits. This finding illustrates the aphorism that the most "expensive" bed in the hospital is the unoccupied bed. The importance of the occupancy factor is demonstrated by the fact that if the group with deficits had accommodated sufficient additional patients to bring their occupancy to the level of the hospitals with surrluses (without any additional expenditure of money and with no drop in per diem income from patients), their deficits would have been wiped out. These suppositions are not wholly realistic, but the relationship between fixed and variable costs in hospitals is such that an increase in occupancy can be expected to result in a much smaller increase in expenditures. The low occupancy among the hospitals with deficits accounts in part for their high costs per patient day and their resulting deficits.

These are some of the deductions and conclusions that can be drawn from an analysis of the ten ratios. In 1951, 25% of all general hospitals (non-Catholic, non-government) had an operating deficit, yet local inquiries lead to the conclusion that this study and these ratios are practically unknown and even if it were known it would not be used in the manner intended since there was never a demand from the field for a more up-to-date study indicating that some hospitals were actually calculating their own ratios and comparing them to the published ones. That is the equivalent of

Pennell, M. Y. and others, Income and Expense Ratios of General Hospitals, 1951, op. cit., p. 2

<sup>&</sup>lt;sup>2</sup>Ibid. p. 9

<sup>3</sup> Tbid. p. 11

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saying that "I know I am sick but I do not care what is wrong with me nor do I want to help myself --- I will just continue as I am hoping things will change and everything will come out all right".

The analytical function of controllership is the tool of management that these hospitals need to interpret these statistics.

#### CHAPTER V

WHAT CONTROLLERSHIP CAN DO FOR HOSPITAL ADMINISTRATION (cont.)

Up to this point we have examined, in more or less detail. as extensively as the limited space will allow, the service that can be rendered hospital administration by the controllership function in the fields of planning (including a critical examination of the objectives and the progress thereto), budgeting, analysis of financial and non-financial statistics, and the presentations to top management of reports and recommendations based on these statistics in a staff capacity. Little has been said, nor is it the purpose of this dissertation to elaborate further than to mention. the routine and prosaic duties of the controller such as chief accounting officer of the hospital, chief auditor, and the authority for all insurance and tax matters. Let it siffice to say that those fields are within his province. The fact that being the chief accounting officer and the chief auditor too may be something of an incongruity to some people in that the controller is placed in the position of auditing himself. However, this fact can be reconciled by pointing out that under the modern concept of controllership, the controller should be so far removed from the mechanics and actual detail of either accounting or auditing that

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he is, in fact, merely the common senior that the working accountant and the working auditor report to. This is the generally accepted status found in most of industry today. The accountant and the auditor may engage in the antagonisms and squabbles of the inspected and the inspector, but the controller is envisioned at least one notch higher in the management scale to gain the objectivity, impartiality, and rectitude that would enable him to escape the charge of auditing himself.

Other areas that are encompassed in the scope of the controllership field that need but mentioning, because the job descriptions are well established by both custom and usage, are inventory control, pensions and bonuses, retention, preservation, and destruction of business records, credit and collections, and finally, but not to the exclusion of any others, methods, systems, and manage-It is in this subject that controllership has much ment audits. to offer hospital administration. One word about inventory control, though, before proceeding on to management audits. self-evident that organizations as capital starved as hospitals are as a general rule would not desire to tie up one penny more than necessary in inventories. The inventories carried by the hospital, whether of medical and surgical supplies, linens, food, or housekeeping materials should be carefully analyzed as to stock levels, availability, price trends, and emergency needs so as to keep capital fluid and not just "on the books" and tied up tighter than a drum in slow moving inventories. This, of course, merely is advocating the control of inventories in order to keep capital

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fluid, some other disadvantages of high inventory levels also cannot be overlooked since hospital inventories are susceptible to loss by pilferage, misappropriation, and deterioration.

We all give our automobiles a tune-up periodically because we know that very little in this world is static; as materials age, as parts carbon up, as bearings wear, the motor will run more smoothly and efficiently with different adjustments and cor-Some of the original settings have slipped a little. The same analogy precisely can be applied to organizations. Any organization needs a management audit periodically just as our cars need a tune-up; and for the very same reason. Some of the personnel have slowed down, some have gained greater capacity, some have left the organization and their replacements are of greater or lesser ability. These factors might call for a minor tune-up in the organization, a rearrangement of some of the work load in closely allied fields for greater efficiency. However, major tune-ups and complete overhauls are also indicated, but the machine or organization gets into a sorry state and highly in efficient if we wait for obvious symptoms or complete breakdown before The purpose of the management audit is to detect taking action. and eliminate the symptoms while they are small inefficiencies; if that is tried, the major breakdown seldom, if ever, occurs.

This brings us to the management engineering function of the controller. Most industrial organizations have within the controller's department, because it seems to fit better there than anywhere else, a "methods and analysis group" who periodically and

wall changed the grade of approximation except the sawhich has a larger to affect which place the party of the the same of the sa were secondly and efficiently often bit result in this way were with the complete area conditions for the sent to sent the we have been pure of Jellippe of the United to the land and the the test to the production of the Toronto a state of the test of t THE RESERVE AND THE PARTY SALE PROPERTY IN THE PARTY IN THE PARTY. BOIL OF THE REAL PROPERTY AND ADDRESS OF THE PARTY AND ADDRESS OF THE P mility to got simulation class on pleasurement colf symbol and gold and its to the miles and the constant pt look that he was to be a cope and the cope at the comments of the course of was and the first of the first waters or other than 63-de present out that a fill the to the perfect positioners and province or tendency and how will take out to treat there at all the former and to some on hit . with a same the prediction of the control of the suppliers are presented in the . The state of the

continually conduct inquiries into such areas as work simplification, systems and methods analysis, internal and external communication, and the make-up, routing, and format of the records, forms, and reports used throughout the organization. In the medical department, particularly in the operating rooms, much study has been given over to the eternal search for "the one best way". Elimination of lost motion, perfection of timing, and making the lay-out yield maximum utilization are constantly being worked on by the medical staff. The average operation room surgical team shows the years and years of time and motion studies that have gone into the development of the techniques used. It is difficult to say the same for the average hospital's business and record A perusal of the literature in the field shows that business techniques in use for decades by progressive merchantile and manufacturing concerns are hailed as new and great advances when applied to hospital administration. A glance at the advertisements demonstrating the type of equipment being urged for adoption in the field of hospital administration shows that all these are conversions of business equipment, methods, and forms in use for many, many years in industry and introduced relatively recently in hospital administration. It is a safe bet to wager that the application of these machines, methods, and forms to hospital work came about through the sales engineering force of the manufacturer devising new marketing fields for his product rather than a hospital administrator or accountant going to a manufacturer and requesting a machine or form based on his derivation of a labor-saving or time-saving technique.

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Time and motion studies, work simplification, work measurement, methods and systems analysis, and flow charts should be in constant use in a hospital continually searching for "the one best way". The office of the controller should have a small sign (where he alone can see it, perhaps pasted inside a desk drawer or along the edge facing him of his desk set) as a constant reminder to progress. "The minute you say a job cannot be improved ---- You're through!" That sign occupies an entire page of the U.S. Marine Corps Management Improvement Handbook . An example of the above is pointed out by this instance: A U. S. Naval Hospital recently reported in one of its efficiency improvement reports that it was able to reduce its nursing staff requirements by two nurses per floor by the installation of a simple office type inter-communication system so that all the wards on a given floor could be controlled by a central nursing station. That is fine. But now let us look at that "improvement" in another light. The hospital was in existance for over twenty years and office inter-communication systems for at least as long --- but it took this amount of time to evolve a simple labor saving technique. If the facts of the matter were further delved into it undoubtedly would have been discovered that the new method was forced upon them by the non-availability of nurses so that the new system was evolved by necessity. And then it was found that the non-available nurses could be dispensed with permanently from the organization table.

U. S. Marine Corps, Management Improvement Handbook, Vol. I. NAVMC 1088-ADM (Revised) (Washington: Department of the Navy, Headquarters, USMC, June 1954)

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Had management engineering been applied on a continuing basis it is not illogical to suppose that this particular laborsaving device might have been evolved fifteen years earlier. If it was not picked up on the first survey, perhaps on the second, or even on the fifth or tenth; but the point is that it most probably would have been picked up before necessity forced it to be adopted. There are hundreds and perhaps thousands of procedures that have continued year after year just because no one cast a critical eye at them in a studied effort to improve them. Management audits are as necessary as financial audits if the organization is to be a progressive one showing an increase in productivity, efficiency, and service for each dollar expended.

It is generally calculated that the productivity of the American worker is on an upward trend which averages 3% a year when measured over the last decade or two; the pay of the wage earner is in an upward spiral averaging anywhere from 7% to 15% a year; the gap between the two figures can only be bridged by improved techniques in every phase of management on a continuing and calculatingly deliberate basis. Industry's answer to the squeeze between the productivity trend and the wage scale spiral has been automation --- obviously this is not the answer to the problem in a hospital, however hospitals compound their problem because while new medical techniques have increased the need for hospital employees per patient by 34%, little has been done to compensate for this increase by a corresponding decrease (even partial) due to increased efficiency in managerial engineering. As a result, it is

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predicted that hospital costs will continue to increase at about 5% a year for many years to come.

Hospital administration must consider controllership as part of a broader management control plan for efficient, economical, and effective management. The fully coordinated staff service provided by the controller should relieve management of much of the burden of detailed fact collection, coordination, and analysis.

When properly performed, controllership will enable management to spend more of its time in the areas of policy formulation, decision, and program direction.

<sup>1</sup> Time, April 9, 1956, p. 77.

# CHAPTER VI

CONCLUSION

The controllership concept has been envisioned as embodied in a man heading a large department consisting of many divisions. among which were accounting, budgeting, analysis, taxes, insurance, and auditing, just to enumerate a few. The most difficult point to get across to persons unfamiliar with the controllership concept is that this "large department" can be a "one-man band" --- even one where the "one-man band" is the administrator and has to switch hats depending on whether he is talking as a line operator or as his own staff. This large organization within an organization is only tailored for illustrative purposes to meet the demands of a hospital whose size and complexity needs the controls, analysis, and associated services that this controller's department can supply. The controllership concept can be tailored to fit any sized hospital from a ten bed town hospital to a two thousand bed medical center.

The very reason for the average hospital's existence, that of providing a service, a very expensive service, a service that few persons can afford without serious financial adjustment, and many persons cannot afford at all, should be impetus enough to be the spur to providing that service as efficiently and as cheaply

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(the terms are synonomous in this sense) as possible. The key to this efficiency is in the controllership concept; industry has found it that way --- hospital administration desperately needs to adopt the same key. A preface to this adoption is a discarding of the concept that it is evil to employ business methods to the business side of hospital administration. It is not sinful to operate with a surplus. Efficiency is not incompassionateness. The elimination of all lost motion, excess labor, material waste, and duplication of effort is not a curse but a blessing.

It is hard to define the controllership concept in words; it is more of a way of life --- a way of business life --- that is constantly on the search for the "one best way" of accomplishing each and every facet of an organization's operations. It was once defined by the controller of one of the country's industrial giants, when asked what exactly did he do, as, "If a woman did it, it would be called 'nagging'." That is not as facetious as it may sound, for, as pointed out so many times previously, the controller does not and cannot control. He can only present the facts to the line operator in such a way that he is goaded into remedial action.

Our hospital administrators come from almost every one of the varied professions and vocations that make up hospital organizations, and all their backgrounds stand them in good stead, if they can submerge them completely so that the whole of hospital administration is not overbalanced by the predjudices or blindnesses of partiality. As an administrator, the personal traits

of living, thinking, and acting like an executive and a line operator must come to the fore. The controller, though, should be the alter ego of the executive, divorce himself from the hurly-burly of day to day operations and be the staff man, detached, objective, and calculatingly aloof. He must live like a researcher, think like a businessman, and act like a psychologist.

The detachment of a researcher is important if his analysis of the mass of operating statistics is to have the interpretation that is neither predetermined nor wished for. can make it so" if the analysis is done by a person striving to prove a preconceived result. The ability to think like a business man is possibly doubly important to the controller of a hospital since he is probably the only one in the entire organization whose eye is fixed straight on the earned surplus and the effect that each and every phase of operations will ultimately have on The medical staff and even the administrator can that surplus. keep their "blind eye" on the profit --- only as long as somebody is actually keeping a vigilant eye on it --- and that is best done by the controller. The controller, in the background of the administration, rarely meeting the public as the direct representative of the hospital and never exerting pressure on the internal staff except through the administrator or Board of Trustees, is the perfect tool of management for keeping his eye on that elusive dollar. The official top management can be as sanctimonious as they please regarding their altruism, the controller is always in the background advising, recommending, and demonstrating on the

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effect of any policy embarked on. This should be just as true whether the controllership concept is the alter ego of a one man operation or is embodied in a fifteen or twenty man staff.

The final broad characteristic of the controller's personality is the ability to deal with human beings as a psychologist. Knowing human nature and being able to get the personnel on all levels to work with rather than against him is a hurdle that must be overcome if the controller is going to be at all successful. In this regard he is operating under a handicap from the start; he is the architect of the budget, that terrible instrument of torture and pressure that is the bane of most operating men and the source of most of their frustrations. If he surmounts that obstacle with a good understanding of human relations and salesmanship, ho must avoid, at all costs, any intimation that he is the "gestapo" or top management spy; always looking for something wrong and always followed by a blast from the front office based on his find-If that label is attached to the controller he cannot help ings. but fail in his mission. It is indeed a tight rope that he must walk with a bad fall into failure for a misstep in any direction. A false impression given by one thoughtless act will probably be irreparable and destroy a controller's effectiveness for good and a11.

Hospital administration can apply this concept of controllership, the function, and the idealization of the controller, as a man. The function, as has been spelled out, is top management's right hand tool in running the organization successfully.

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That is the key word, "successfully" --- organizations, especially quasi-public ones, can run ad infinitum without an approach to the efficiency that marks a successful venture in private industry. The man, with the characteristics as portrayed, is going to be difficult to find. Modern industry is on a constant search for top executives with the attributes of the controller envisioned here. However, somewhere a dedicated man may be found, or perhaps hospital administration may have to settle for something less than the optimum, but one point is clear, hospital administration needs the modern controllership concept.

#### BIBLI OGRAPHY

#### Public Documents

- U. S. Department of Health, Education, and Welfare, Public Health Service Publication No. 407, "Income and Expense Ratios of General Hospitals" Washington: Government Printing Office, 1954.
- U. S. Marine Corps, Management Improvement Handbook, Volume I.

  NAVMC 1038- ADM (Revised) Washington: Department of the
  Navy, Headquarters, USMC, June 1954.

#### Reports

- American Hospital Association, Annual Statistical Guides, Tables
  of Statistics compiled for the Administrators Guide Issue,
  Hospitals, The Journal of the A. H. A., June 1954 Part II
  and June 1955 Part II.
- Dun and Bradstreet, Inc., "Table of Fourteen Important Ratios with Interquartile Range for 74 Lines of Business Activity"

  <u>Dun's Review and Modern Industry</u>, annually in October and November issue
- Hospital Management magazine, "How's Business Report", a report issued each month as a regular feature of the publication giving Statistical Tables of Expenses by Departments and compiled regionally.
- Hospital Methods Research Council, "Streamlining Hospital Paper-work", Cleveland: 1952
- Methods Improvement, Committee on, Council on Administrative Practice of the American Hospital Association, "Methods Improvement" an interim report, Chicago: May 1954.

#### Articles

- Beddow, John H. "Industrial Aid Works Wonders," The Modern Hospital, June 1955
- Brennan, J. J. jr "Hospitals Need Business Know How." The Harvard Business Review, Vol 32 No. 5, Sept-Oct 1954.
- Cardwell, H. M. "Determining Charges -- The Lifeline of the Hospital" Hospital Accounting, April 1953

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## - 11,-

- Dillon, W. B. "Hospital Admissions Streamlined" Systems, Vol XX
  No. 1, January-February 1956.
- Emich, A. F. "Control Means Action," Harvard Business Review, July-August 1954
- Goettelman, G. M. "Scientific Management Enters Civic Affairs,"
  Advanced Management, September 1955
- Grubel, F. "Hospital Finances and the Medical Staff," Hospital
- McCormick, E. "Hospitals are Everybody's Business," The Reader's Digest, September 1955
- Nye, R. C. and others, "Preparing the Hospital Budget," Hospitals
  December 1953
- Peirce, J. L. "Controllership and Accounting --- A Contrast," The Controller, September 1953
- Peirce, J. L. "The Planning and Control Concept" The Controller September 1954
- Pennell, M. Y. and others, "Hospital Income and Expense Ratios, 1951," Public Health Reports, Vol 69 No. 10, October 1954
- Schoeller, V. D. and Anyon, G. J. "Scientific Management in Hospital Administration," Advanced Management, January 1956

#### Unpublished Material

American Hospital Association, Council on Prepayment Plans and Hospital Reimbursement, "Principles of Payment for Hospital Care," June 1953 (mimeographed paper)

#### Books

- American Hospital Association, "The Index of Current Hospital Literature," (Chicago: 1954)
- Anderson, D. R. Practical Controllership Chicago: Richard D. Irwin, Inc., 1949
- Blocker and Weltmer, <u>Cost Accounting</u> Third Edition New York: McGraw-Hill, 1954.
- Bradshaw, T. F. and Hull, C. C. (ed.) Controllership in Modern Management Chicago: Richard D. Irwin, Inc. 1950
- Doris, L. (ed.) The Corporate Treasurer's and Controller's Handbook New York: Prentice-Hall, Inc. 1950.

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- Foulke, R. A. Practical Financial Statement Analysis New York:
  McGraw-Hill Book Co., Inc. 1945
- Heckert, J. B. and Willson, J. D. Controllershin New York: The Ronald Press Co., 1952
- Lamperti, F. A. and Thurston, J. B. Internal Auditing for Management New York: Prentice-Hall, Inc. 1953
- Rautenstrauch, W. and Villers, R. <u>Budgetary Control</u> New York: Funk and Wagnalls Co. in association with Modern Industry Magazine 1950.
- Vatier, W. J. Managerial Accounting New York: Prentice-Hall, Inc., 1950

